

ABSTRACT

A flame resistant polyester fiber, while maintaining physical properties, such as heat resistance, tensile strength and elongation, etc. of usual polyester fibers, having excellent flame resistance and excellent setting property, and furthermore having controlled gloss of fiber is provided. A composition obtained by melt kneading of a polyester (A) comprising polyalkylene terephthalates, and one or more kinds of copolymerized polyesters having polyalkylene terephthalate as a principal component; a polymer alloy (B) consisting of polyalkylene terephthalates and polyarylates; phosphorus based flame resistant agents (C); and phosphite based compounds (D), and organic fine particles (E) and/or inorganic fine particles (F) are mixed thereto to obtain a composition. The obtained composition is melt spun to obtain a flame resistant polyester fiber in which the above-mentioned problems are solved, and to obtain artificial hair using the fiber.